

Review published in *Public Understanding of Science* April 2001

Ullica Segerstrale (editor), ***Beyond the Science Wars: the missing discourse about science and society***
(Albany: State University of New York Press, 2000)



The drama of the science wars: what is the plot ?

Helena Sheehan

What is the basic storyline in the drama of the science wars ? Is it a conflict of science versus science studies ? Or is it a conflict of pro-science versus anti-science tendencies ? Or is it a conflict of epistemological realism versus relativism; of scientific objectivity versus sociological constructivism ? Or more broadly of positivism or neopositivism versus postmodernism, feminism, marxism, afrocentrism, new age mysticism ? Or is it a conflict of right versus left ?

All of these are, at the very least, subplots, according to various participants and observers, but every one of these ways of conceptualising the conflict is also contested by others. Scientists are on both sides of the divide and so are philosophers and sociologists of science. Certainly the left is actively on both sides of it. So the issues involved are quite complex. To venture to say what is the overall storyline in the saga, let alone to define the core issue and take a substantive position on it, is to traverse tightly contested terrain.

Nevertheless, let us do so, as have the authors of this book. Their aim is to situate the science wars as a social phenomenon and in so doing to dispel the idea that it is a clash between two cultures, that it is an opposition between science and science studies. Rather, they argue, it has been waged by a minority of scientists against a particular school within science studies. They call for a new sociology of science that will bring scientists back into the process, not least as a reality check, badly needed by some sociologists of science. They eschew sociological reductionism and advocate a comprehensive sociological explanation of science that also weighs the factors scientists themselves consider important, particularly cognitive considerations.

This book is a lucid account of the 1990s science wars. The main *dramatis personae* appear: Gross, Levitt, Sokal, Wolpert, Dawkins, Weinberg et al ranged on the one side and Ross, Aronowitz, Barnes, Bloor, Edge, Collins, Harding, Haraway, Latour et al on the other. The catalytic events are analysed: the publication of Gross and Levitt's *Higher superstition* (Gross and Levitt 1994), the now infamous Sokal hoax and the flurry of publicity surrounding it, the science wars special issue of *Social Text* with the Sokal article (Sokal 1996) in it and the book (Ross 1996) without it, the Wolpert-Collins confrontation at the BAAS in 1994, the New York Academy of Science conference published as *The flight from science and reason* (Gross, Levitt and Lewis 1996) and more.

The authors, each in their own way, try to navigate a middle way between the extreme positions. Ullica Segerstrale and Steve Fuller most directly outline and analyse the debates of the last decade. Indeed they regale us with tales from the front, which make interesting reading, even to the most informed reader on this topic.

The essays in this book do not cohere particularly well, although none are irrelevant to the science wars. Valery Cholakov traces, albeit in a thin and sketchy fashion, three cases of societies upholding strong pro-science positions: pre-WW1 Germany, post-WW2 USA and the USSR. Stephen Fuchs mounts, unsuccessfully in my opinion, a defence of objectivity by sociologising it. Henry Bauer takes issue with anti-science tendencies within STS and sets this in the context of cycles of dominance of rationalism and anti-rationalism. Bernard Barber assesses the advances in STS during his career as well as positions which now need to be transcended. John Ziman examines the nature of science's social contract at the end of 20th century and the new type of post-academic science which is emerging, with new structures, new sponsors, new rules, new criteria

The authors do not see the 1990s debate as arising *ex nihilo* and attempt to place it within an intellectual history going further back. They place it in relation to the trajectory in philosophy of science from Popper through Kuhn to Feyerabend, to sociology of knowledge from Mannheim through Merton to the Edinburgh School, to the contemporaneous culture wars and to other trends and positions as well.

I do not find their attempt to contextualise the science wars to be satisfactory, however. It lacks fullness and shape and proportion. I do not believe, for example, that they have adequately conceptualised the place of the marxist tradition in the intellectual history of these debates, despite a few passing references to Marx, Bernal, Haldane, Hessen, Lewontin. Marxism constitutes a long and complex intellectual tradition, which has robustly combined a defence of the cognitive capacity of science with a strong emphasis on its socio-historical character. Given the fact that these current debates dramatise a striving to reconcile the rationality of science with the historicity of science, it would do no harm for those involved in this debate to know more of the preceding debates that have taken place within this tradition and between it and contending positions. (Sheehan 1993).

The basic storyline, I contend, is the epistemological crisis of our times in its fullest socio-historical context. The conflict between a particular group of scientists and a particular trend in science studies is only one subplot in a much larger and longer drama.

[Dr. Helena Sheehan](#)
Dublin City University

Gross, P and Levitt, N 1994. *Higher superstition: the academic left and its quarrels with science*. Baltimore: Johns Hopkins University Press.

Gross, P, Levitt, N and Lewis, M (eds) 1996. *The flight from science and reason*. Baltimore: Johns Hopkins University Press.

Ross, A (ed) 1996. *Science wars*. London and Durham: Duke University Press.

Sheehan, H 1993. *Marxism and the philosophy of science: a critical history*. London and Atlantic Highlands: Humanities Press.

Sokol, A 1996. "Transgressing the boundaries: toward a transformative hermeneutics of quantum gravity" *Social Text* 46/47:217-252.